



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

David A. Spear et al.

Serial No.: 08/559,965

Filed: November 17, 1995

Title: Swept Turbomachinery Blade

Docket No. <sup>108-76</sup> EH-9376

Date: July 25, 1996

Art Unit: 3401 ✓

Examiner: M. Sgantzos

Commissioner of Patents and Trademarks  
Washington, DC 20231

Dear Sirs:

In response to the Official Action dated July 1, 1996, please amend the above identified application as follows:

**In the Claims:**

Please amend claim 1 as follows:

a' 1. (Once amended). A turbomachinery blade for a turbine engine having a cascade of blades rotatable about a rotational axis so that each blade in the cascade has a leading neighbor and a trailing neighbor, and each blade cooperates with its neighbors to define flow passages for a working medium gas, the blade cascade being circumscribed by a case and under some operational conditions an endwall shock extends a limited distance radially inward from the case and also extends axially and circumferentially across the flow passages, and a passage shock also extends across the flow passages, the turbomachinery blade including an airfoil having a leading edge, a trailing edge, a root, a tip and an inner transition point located at an inner transition radius radially inward of the tip, the blade characterized in that at least a portion of the leading edge radially outward of the inner transition point is swept and a section of the airfoil radially coextensive with the endwall shock extending from the leading neighbor intercepts the endwall shock so that the endwall shock and the passage shock are coincident.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in accordance with the provisions of the Patent and Trademark Act, 35 U.S.C. 42, or as otherwise

July 25, 1996  
Anna Sgardinskas  
Specialist  
July 25, 1996  
Date

7/A  
8/20/96  
Fecok